```
AAC76461 standard; cDNA; 1406 BP.
 ID
 XX .
 AC
      AAC76461;
 XX
 DT ·
      08-FEB-2001
                   (first entry)
 XX
      Human ORFX ORF2016 polynucleotide sequence SEQ ID NO:4031.
 DE
 XX
KW
      Human; open reading frame; ORFX; detection; cytostatic; hepatotropic;
     vulnerary; antipsoriatic; antiparkinsonian; nootropic; neuroprotective;
KW
KW
      anticonvulsant; osteopathic; antiarthritic; immunosuppressant; cardiant;
KW
      immunostimulant; thrombolytic; coagulant; vasotropic; antidiabetic;
      hypotensive; dermatological; immunosuppressive; antiinflammatory;
KW
KW
      antiviral; antibacterial; antifungal; antirheumatic; antithyroid;
      antianaemic; gene therapy; cancer; proliferative disorder; hypertension;
KW
KW
     neurodegenerative disorder; osteoarthritis; graft vs host disease;
      cardiovascular disease; diabetes mellitus; hypothyroidism; SCID; AIDS;
KW
     cholesterol ester storage; systemic lupus erythematosus; infection;
KW
KW
     severe combined immunodeficiency; malaria; autoimmune disorder; asthma;
     allergy; aplastic anaemia; nocturnal haemoglobinuria; burn; wound;
RW
     bone damage; cartilage damage; antiinflammatory disease; coagulation;
KW
     thrombosis; contraceptive; ss.
KW
XX
OS
     Homo sapiens.
XX
PN
     WO200058473-A2.
XX
PD
     05-OCT-2000.
XX
PF
     31-MAR-2000; 2000WO-US008621.
XX
PR
     31-MAR-1999;
                    99US-0127607P.
PR
     02-APR-1999;
                    99US-0127636P.
PR
     05-APR-1999;
                    99US-0127728P.
     30-MAR-2000; 2000US-00540763.
PR
XX
PA
     (CURA-) CURAGEN CORP.
XX
PI
     Shimkets RA, Leach M;
XX
DR
     WPI; 2000-602362/57.
DR
     P-PSDB; AAB42252.
XX
p_{T}
     Novel nucleic acids and peptides derived from open reading frame X,
PT
     useful for treating e.g. cancers, proliferative disorders,
PT
     neurodegenerative disorders and cardiovascular disease.
XX
PS
     Claim 5; Page 3217-3218; 5507pp; English.
XX
CC
     AAC74446 to AAC77606 encode the proteins given in AAB40237 to AAB43397,
    which represent the human ORFX open reading frames 1 to 3161. The ORFX
C
C
    sequences have activities such as: cytostatic; hepatotropic; vulnerary;
C
    antipsoriatic; antiparkinsonian; nootropic; neuroprotective; osteopathic;
    anticonvulsant; antiarthritic; immunosuppressant; immunostimulant;
C
CC
    cardiant; thrombolytic; coagulant; vasotropic; antidiabetic; hypotensive;
    dermatological; immunosuppressive; antiinflammatory; antibacterial;
00
C
    antiviral; antifungal; antirheumatic; antithyroid; and antianaemic. The
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sequences can be used for determining the presence of or predisposition CC , to, or preventing or treating pathological conditions associated with an ORFX-associated disorder. The nucleic acids can be used to express ORFX proteins in gene therapy vectors. The proteins and nucleic acids may be used to treat cancers, proliferative disorders, neurodegenerative disorders, osteoarthritis, graft vs host disease, cardiovascular disease, diabetes mellitus, hypertension, hypothyroidism, cholesterol ester storage, systemic lupus erythematosus, severe combined immunodeficiency (SCID), AIDS, viral, bacterial or fungal infection, malaria, autoimmune disorders, asthma, allergies, aplastic anaemia, burns, wounds, bone and cartilage damage, nocturnal haemoglobinuria, antiinflammatory disease; to enhance coagulation; to inhibit thrombosis; and as a contraceptive

CC

CC

CC

CC

CC

CC

CC

CC

CC XXSQ

11

Sequence 1	406 BP; 521	A; 255 C;	328 G; 301	T; 0 U; 1 0	ther;	
naagctgaga	acgcatcttt	agctaaactt	cgcattgaac	gagaaagtgc	cttqqaaaaa	61
ctcaggaaag	aaattgcagg	cttcgaacaa	cagaaagcaa	aagaattagc	togaatagaa	12(
gagtttaaaa	aggaggagat	gaggaagcta	caaaaggaac	gtaaagtttt	tgaaaagtat	180
actacagetg	caagaacttt	tccagataaa	aaggaacgtg	aagaaataca	qactttaaaa	24(
cagcaaatag	cagatttacg	ggaagatttg	aaaagaaagg	agaccaaatg	gtcaagtaca	301
cacageegre	tcagaagcca	gatacaaatg	ttagtcagag	agaacacaga	cctccqqqaa	361
gaaataaaag	tgatggaaag	attccgactg	gatgcctgga	agagagcaga	agccatagag	42(
agcagcctcg	aggtggagaa	gaaggacaag	cttgcgaaca	catctgttcg	atttcaaaac	480
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ggacaggetg	cctctcccag	ggagccactt	gaaccactga	acttcccaga	tcctgaatat	661
aaagaggagg	aggaagacca	agacatacag	ggagaaatca	gtcatcctga	tggaaaggtg	72(
gaaaaggttt	ataagaatgg	gtgccgtgtt	atactgtttc	ccaatggaac	tcgaaaggaa	78(
gtgagtgcag	atgggaagac	catcactgtc	actttcttta	atggtgacgt	gaagcaggtc	84(
atgccagacc	aaagagtgat	ctactactat	gcagctgccc	agaccactca	cacgacatac	900
ccggagggac	tggaagtett	acatttctca	agtggacaaa	tagaaaaaca	ttacccagat	951
ggaagaaaag	aaatcacgtt	tcctgaccag	actgttaaaa	acttatttcc	tgatggacaa	1020
gaagaaagca	ttttcccaga	tggtacaatt	gtcagagtac	aacgtgatgg	caacaaactc	1081
atagagitta	ataatggcca	aagagaacta	catactgccc	agttcaagag	acgggaatac	114(
ccagatggca	ctgttaaaac	cgtatatgca	aacggtcatc	aagaaacgaa	gtacagatce	120(
ggtcggataa	gagttaagga	caaggagggt	aatgtgctaa	tggacacgga	gctgtgacga	1260
tectcargrg	atcatgaagt	aacagtaact	gactttttat	gttaaaaaat	gtacatttac	1324
rgrggattet	gtttaattta	ttgtgtatgt	gtggggaaaa	gattggattc	taaaataaaa	138(
gereaccetg	tggcaaaaaa	aaaaaa				1407